

Notice of Allowability	Application No.	Applicant(s)	
	10/618,791	PANNEK ET AL.	
	Examiner	Art Unit	
	Christopher P. Bruenjes	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed July 6, 2007.
2. ☒ The allowed claim(s) is/are 1,3,4,6-9 and 20-22.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>20070720</u> . 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____. |
|---|---|

EXAMINER'S AMENDMENT

Drawings

1. The replacement drawings received on October 11, 2005 containing Figures 1-4 and Figures 5a and 5b of the original drawings received on July 14, 2003 are acceptable.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jong Lee on July 20, 2007.

The application has been amended as follows:

Regarding the title) Delete "Component and method of manufacturing same" and replace with --Micromechanical Component--.

Claim 1) Delete:

"A component, comprising:

Art Unit: 1772

a functional layer;

a surface micromechanical structure produced in the functional layer and including movable elements and immovable elements;

at least one electrically non-conductive first insulation layer;

at least one first sacrificial layer; and

a substrate to which is connected the functional layer via the at least one electrically non-conductive first insulation layer and the at least one first sacrificial layer,

wherein:

the movable elements are exposed by partially removing the at least one first sacrificial layer in the area of the movable elements,

the at least one electrically non-conductive first insulation layer includes a material that is substantially not attacked in the removing of the at least one first sacrificial layer, and

the component is configured to perform an intended functionality of the component."

Replace with

-- A component, comprising:

a functional layer;

Art Unit: 1772

a surface micromechanical structure produced in the functional layer and including movable elements and immovable elements;

at least one electrically non-conductive first insulation layer;

at least one first sacrificial layer;

an electroconductive layer that is structured and that is contactingly situated vertically between the at least one electrically non-conductive first insulation layer and the at least one first sacrificial layer; and

a substrate to which is connected the functional layer via the at least one electrically non-conductive first insulation layer and the at least one first sacrificial layer,

wherein:

the movable elements are exposed by partially removing the at least one first sacrificial layer in the area of the movable elements,

the at least one electrically non-conductive first insulation layer includes a material that is substantially not attacked in the removing of the at least one first sacrificial layer,

in a first area of the immovable elements the functional layer is in direct contact with the electroconductive

Art Unit: 1772

layer and in a second area the functional layer is in direct contact with the at least one first sacrificial layer, and
the component is configured to perform an intended functionality of the component.—

Cancel claim 2.

Cancel claim 5.

Claim 20) Delete:

"A component, comprising:

a functional layer;

a surface micromechanical structure produced in the functional layer and including movable elements and immovable elements;

at least one electrically non-conductive first insulation layer;

at least one first sacrificial layer; and

a substrate to which is connected the functional layer via the at least one electrically non-conductive first insulation layer and the at least one first sacrificial layer,

wherein:

Art Unit: 1772

the movable elements are exposed by partially removing the at least one first sacrificial layer in the area of the movable elements,

the at least one electrically non-conductive first insulation layer includes a material that is substantially not attacked in the removing of the at least one first sacrificial layer, and

the component includes at least one area where:

the at least one electrically non-conductive first insulation layer is arranged over the substrate;

a conductive layer is arranged over the at least one electrically non-conductive first insulation layer; and

the at least one first sacrificial layer is arranged over the conductive layer, and

the component is configured to perform an intended functionality of the component."

Replace with

--A component, comprising:

a functional layer;

a surface micromechanical structure produced in the functional layer and including movable elements and immovable elements;

Art Unit: 1772

at least one electrically non-conductive first insulation layer;

at least one first sacrificial layer; and

a substrate to which is connected the functional layer via the at least one electrically non-conductive first insulation layer and the at least one first sacrificial layer,

wherein:

the movable elements are exposed by partially removing the at least one first sacrificial layer in the area of the movable elements,

the at least one electrically non-conductive first insulation layer includes a material that is substantially not attacked in the removing of the at least one first sacrificial layer, and

the component includes at least one area where:

the at least one electrically non-conductive first insulation layer is arranged over the substrate;

a conductive layer is arranged over the at least one electrically non-conductive first insulation layer; and

the at least one first sacrificial layer is arranged over the conductive layer,

in a first area of the immovable elements the functional layer is in direct contact with the conductive layer

Art Unit: 1772

and in a second area the functional layer is in direct contact with the at least one first sacrificial layer, and

the component is configured to perform an intended functionality of the component.—

3. The following is an examiner's statement of reasons for allowance: Each independent claim identifies the uniquely distinct feature of the functional layer in a first area of the immovable elements being in direct contact with the electroconductive layer and in a second area of the structure the functional layer is in direct contact with the at least one first sacrificial layer when the at least one first sacrificial layer is situated vertically above the electroconductive layer.

The closest prior art, Reichenbach et al (WO 01/46066 A2) disclose the component claimed except the electroconductive layer, functional layer and sacrificial layers are configured in a manner in which it would not be possible to have the functional layer directly contacting both the electroconductive layer and sacrificial layer at different areas of the functional layer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to

Art Unit: 1772

avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Bruenjes whose telephone number is 571-272-1489. The examiner can normally be reached on Monday thru Friday from 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB
July 20, 2007



ALICIA CHEVALIER
PRIMARY EXAMINER